

ABSTRACT OF THE DISCLOSURE

In a storage tank for storing a liquid reducing agent, a sensor for outputting a signal related to a concentration and a remaining amount of the liquid reducing agent based on a heat transfer characteristic between two points at a distance from each other is disposed. In a control unit which contains a built-in computer, it is determined that a vehicle state is stable when a stop time for which a vehicle is continuously in a stationary state reaches a predetermined determination time, the concentration of the liquid reducing agent is calculated based on the signal from the sensor when the vehicle state is stable, and the remaining amount of the liquid reducing agent is determined based on the signal from the sensor irrespective of the vehicle state, in response to a measurement trigger output every predetermined time after a start of an engine.